

INTERNATIONAL SEARCH REPORT

International apprecation No.

PCT/US03/39889

A. CLASSIFICATION OF SUBJECT MATTER			
IPC(7) : H04Q 7/24			
US CL : 370/338			
According to International Patent Classification (IPC) or to both national classification and IPC			
B. FIELDS SEARCHED			
Minimum documentation searched (classification system followed by classification symbols)			
U.S. : 370/338, 315-326; 455/9-17, 20, 23			
			i
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched			
			i
Plantagia data hara canada di daira da internatival que di decida de la constanti de la consta			
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)			
NPL, EAST			
O DOCUMENTS CONCEDED TO DE DEVENTANT			
C. DOCUMENTS CONSIDERED TO BE RELEVANT			
Category *	Citation of document, with indication, where ap	propriate, of the relevant passages	Relevant to claim No.
A	US 5,875,179 A (TIKALSKY) 23 February 1999 (2	3.02.1999), columns 4-10.	1-49
	, , , , , , , , , , , , , , , , , , , ,		
Α	US 6,005,884 A (COOK et al) 21 December 1999 (21.12.1999). See entire document.		
	1-43		
A	US 5,903,553 A (SAKAMOTO et al) 11 May 1999 (11.05.1999), figures 1-4, columns 4-		
	12.		
A, E	US 2004/0038707 A1 (KIM) 26 February 2004. See	1-49	
		۱,	
		ĺ	
• 1		i	·
			ļ
		i	
		1	·
'			
			i
		ì	
			1
Further documents are listed in the continuation of Box C. See patent family annex.			
Special categories of cited documents: "I" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the			
"A" document	defining the general state of the art which is not considered to be	principle or theory underlying the inve	ation but cited to understand the
of partice	ılar relevance	beamber or mostly memory mig one made	
document of particular relevance; the claimed invention cannot be			
"h" earlier application or patent published on or after the international filing date considered novel or cannot be considered to involve an inventive step			
"L" document	t which may throw doubts on priority claim(s) or which is cited to	when the document is taken alone	
	establish the publication date of another citation or other special reason (as "Y" document of particular relevance; the claimed invention cannot be		
specified		considered to involve an inventive step	
**************************************		combined with one or more other such	documents, such combination
"O" documen	t referring to an oral disclosure, use, exhibition or other means	being obvious to a person skilled in the	art
"P" document	t published prior to the international filing date but later than the	"&" document member of the same patent	family .
priority date claimed			
Data of the actual completion of the interpretional groups			
Date of the actual completion of the international search Date of mailing of the international search report			rch report
19 April 200	14 (19 04 2004)	19 MAY 2004	
		Audiorized offices	Zogan
Mail Stop PCT, Attn: ISA/US Commissioner for Patents		Chi Pham I K JUG Mile	Myling
	D. Box 1450	X	11 1
Alexandria, Virginia 22313-1450 Telephone No. (703) 305,4700			
Facsimile No. (703)305-3230			